

ABSTRACT OF THE DISCLOSURE

An electric wiring simulation device 1 of the present invention includes an input device 2; a display 5; a characteristics information data base 4 storing parts information on parts and wirings, discharge characteristics of a power supply, current-prearcing time characteristics of protecting parts and current-smoke time characteristics of the wirings; an assigned path searching unit 11 searching an assigned path between a short-circuit point and the power supply on a test object circuit; a current value calculating unit 12 calculating a resistance value on the assigned path based on the parts information, and calculating a short-circuit value based on the resistance value and the discharge characteristics of the power supply; and a judging unit 13 judging whether or not each protecting part is fused or each wiring smokes based on the current-smoke time characteristics and the current-prearcing time characteristics, at unit time intervals.